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Bird flu poses threat to international security, Illinois scholar says

In the past, when government leaders, policymakers and scholars have turned their attention to peace and security issues, the talk invariably has focused on war, arms control or anti-terrorism strategies. But Julian Palmore believes it's time to expand the scope of the conversation.

"One thing that is not talked about enough is infectious diseases," said Palmore, a mathematics professor at the University of Illinois at Urbana-Champaign and the director of the university's Program in Arms Control, Disarmament and International Security. "Of course, the spread of AIDS has been and continues to be a major concern worldwide," he said, "but an even greater threat, with regard to international security, may well be avian influenza," or bird flu, as it's commonly called.

And while biologists, epidemiologists and other scientists are engaged in efforts to better understand how the disease is contracted and spread in animals and in humans, Palmore said world leaders and policymakers need to seriously consider the potential international security implications that would result from an avian influenza pandemic.

"Natural disasters, especially pandemics, can and do affect international security in many ways," the U. of I. professor wrote in an article titled "Highly Pathogenic Avian Influenza: A Clear and Present Danger to International Security," scheduled for publication in an upcoming issue of the journal *Defense & Security Analysis*.

"They can have disastrous effects on countries' economies, infrastructures, populations, public health and stability. As a consequence of natural disasters, governments may fail and populations may be decimated.

"Thus," Palmore writes, "planning for international security needs must take into account the effects of natural disasters.

"Since avian influenza is of utmost concern in Asia and in many other parts of the world, it is imperative that states' governments and nongovernmental organizations pay attention to the evolution of the Highly Pathogenic Avian Influenza (HPAI) H5N1 virus."

Palmore, who also addresses this topic in a brief critical commentary in the March issue of Defense and Security Analysis, said avian flu poses a potential threat to human security on two fronts.

Because the virus attacks poultry, in effect, it attacks economies by wiping out the foodstocks of affected nations. Both the poultry and tourism industries in China and other Southeast Asian countries where the virus has been detected already have been disrupted by outbreaks of bird flu.

And in today's global marketplace, such disruptions could have broader, more long-lasting consequences, as economic ripple effects could impact other countries as well.

To date, only 80 deaths have been attributed to avian flu worldwide by the World Health Organization, and those deaths have resulted from human contact with infected birds. But, Palmore said, the greatest looming threat to international security is a scenario in which the virus mutates in an abrupt manner, resulting in human-to-human transmission.

If that occurred, he said, the number of human deaths tallied would likely be "on a wider scale than any attack by humans on humans other than nuclear war."

"People think of international security as things people do or don't do," Palmore said. But, he noted, the consequences of infectious-disease outbreaks and natural disasters can be equally severe. We've recently witnessed the effects of just one tidal wave — one hurricane. And as devastating as those occurrences have been, they are not ongoing events over an 18-month period."

While theories on how the avian flu is transmitted and spread among poultry and other fowl remain inconclusive, Palmore said scientists suspect that migratory birds play a major role.

Ducks, geese and other waterfowl -- including those migrating from Asia to Europe and others using flyways that take them from Asia to the United States through Alaska and Canada -- "pose a significant delivery system for avian influenza as they infect domestic birds, then animals by droppings laden with viruses," he said.

So, what can the world's populations do to arm themselves against such a potentially destructive, yet virtually invisible, enemy?

"We cannot stop or divert this delivery system," he said. "What we can do is detect and prevent transmission from domesticated animals to humans as animal infections become apparent through intensive surveillance."

Such efforts already are under way in various locations, Palmore said, including in the United States where volunteers from wildlife organizations are monitoring local bird populations for disease.

But government officials need to step up their efforts as well, he said -- even if that means shifting national-security priorities somewhat.

"The international community is right to recognize the threat posed by international terrorism, but not at the expense of threats such as avian influenza," Palmore said. "For this reason the threat to human life -- worldwide -- must be prioritized and resources allocated accordingly. By strengthening the surveillance and detection of avian influenza the public health organizations will provide an early warning to the onset of an avian influenza epidemic. In turn this warning may provide the opportunity to limit the spread of a virus that has mutated into a form that allows efficient human to human transmission, thereby thwarting a pandemic."

Palmore plans travel to the United Kingdom in March to participate in a conference on international collaboration on planning for pandemics at Wilton Park, Steyning, West Sussex.

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